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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,647	11/25/2003	James Henry DeVore	60,446-243;03ZFM049	5646
26096	7590	09/21/2005	EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			LE, DAVID D	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/721,647	DEVORE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	David D. Le	3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5,7-12 and 14-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,13 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

4

### **DETAILED ACTION**

1. This is the second Office action on the merits of Application No. 10/721,647, filed on 25 November 2003. Claims 1-20 are pending. Claims 5, 7-12, and 14-16 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species. Accordingly, the remaining claims 1-4, 6, 13, and 17-20 are pending for examination.

### **Documents**

2. The following documents have been received and filed as part of the patent application:
- Information Disclosure Statement, received on 11/25/03
  - Replacement drawings, received 07/07/05

### ***Drawings***

3. The drawings were received on 07 July 2005. These drawings are approved.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**5. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

*Claim 18:*

- Claim 18 recites the limitation "said second rotational interface". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

**6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**7. Claims 1-4, 6, 13, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 6,151,978 to Huber.**

*Claims 1-4, 6, 13, and 17-20:*

Huber (Fig. 1; column 1, line 66 – column 6, line 4) discloses a shift by wire vehicle transmission comprising:

- An automated mechanical transmission (14) shiftable between a first and a second gear ratio;
- A first component (16);
- A second component (20) movable relative said first component;

- A first sensor (40) adjacent said first component;
- A second sensor (42) adjacent said second component;
- A controller (32) in communication with said first sensor and said second sensor, said controller operable to inherently determine a relative movement between said first component and said second component indicative of an approximately zero torque condition to initiate a shift between said first and said second gear ratio (i.e., column 2, line 56 – column 3, line 26);
- Wherein said first and second sensors are speed sensors (i.e., column 3, lines 21-26);
- Wherein said controller identifies a speed irregularity signature generated by said first and second sensor (i.e., column 2, lines 56-64, when zero torque condition has not been achieved);
- Wherein said controller identifies a first noise signature component indicative of an approximately zero torque condition (i.e., column 2, line 56 – column 3, line 7, when the controller 32 communicates with the engine control 34 to cause the engine 12 to be driven to a synchronization speed and synchronous condition is achieved); and
- Wherein said first component is a shaft (16).

***Response to Arguments***

8. Applicant's arguments filed on 07 July 2005 have been fully considered but they are not persuasive for the reason as follows:

Applicant argues that Huber'978 reference cannot meet the limitation "determining a relative movement between said first rotational component and said second rotational component indicative of an approximately zero torque condition," as recited in claims 1, 13, and 17, for the reason that Huber sensor (40), within or in communication with the engine (12), is concerned with engine speed. There is no just interpretation would support interpreting an engine as a rotational component.

Examiner respectfully disagrees for the reason as set forth in paragraph 9 and further corroborated as follows:

Huber'978 (column 3, lines 21-26) discloses, "*the transmission control unit 32 and the engine control unit 34 utilize information regarding the rotational speed of the engine output shaft 16 and the transmission input shaft 20. Sensors are schematically illustrated at 40 and 42 for providing the speed information regarding those shafts.*" Clearly, Huber'978 implicitly determines relative movement between the first rotational component (being the input shaft 16) and the second rotational component (being the transmission input shaft 20) via the speed sensor (40) and the speed sensor (42), respectively, indicative of an approximate zero torque condition.

Accordingly, Huber'978 reference, as set forth above, meets the claimed limitations.

*Conclusion*

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ddl

*Charles A. Marmol 9/19/05*  
CHARLES A. MARMOLO  
SUPERVISORY PATENT EXAMINER  
ART UNIT 3681